

Attorney's Docket No.: 20674-008US1 / U2004-0017

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Michael Martin

Art Unit : Unknown

Serial No.: 10/598,671

Examiner: Unknown

Filed

: September 7, 2006

Conf. No.: 8699

Title

: METHODS AND COMPOSITIONS RELATED TO REGULATION OF

CYTOKINE PRODUCTION BY GLYCOGEN SYNTHASE KINASE 3 (GSK-3)

MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request.

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office Action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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CERTIFICATE OF MAILING BY FIRST CLASS MAIL

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February 5, 2006 Date of Deposit Signature Christy Farmer Typed or Printed Name of Person Signing Certificate

(01 ⁻¹	Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 20674-008US1	Application No. 10/598,671
/ 0	Information Disclosure Statement by Applicant		Applicant Michael Martin	
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U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	4386072	05-31-1983	Horrobin et al.			
	AB	6441053	08-27-2002	Klein et al.			
	· AC	2005/0075276	04-07-2005	Rudd			
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	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or			Translation	
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	AD	WO 98/17288	04-30-1998	PCT				
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(4	Other Documents (include Author, Title, Date, and Place of Publication)						
Examiner	Examiner Desig.						
Initial	ID	Document					
AE Bagshawe, K.D., "The First Bagshawe lecture. Towards generating cytotoxic agents at cancer single Br. J. Cancer, 60:275-281, (1989)							
Bagshawe, et al., "A c		Bagshawe, et al., "A cytotoxic agent can be generated selectively at cancer sites" Br. J. Cancer, 58:700-703, (1988)					
		Battelli, et al., "T lymphocyte killing by a xanthine-oxidase-containing immunotoxin" Cancer Immunol. Immunother., 35:421-425, (1992)					
АН		Berg, D. J., K. Kuhn, K. Rajewsky, W. Muller, S. Menon, N. Davidson, G. Grunig, and D. Rennick 1995. Interleukin-10 is a central regulator of the response to LPS in murine models of endotoxic shock and the Shwartzman reaction but not endotoxin tolerance J. Clin. Invest. 96:2339-2347.					

Examiner Signature	Date Considered		
EXAMINER: Initials citation considered. Draw line through citation if no	t in conformance and not considered. Include copy of this form with		
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	losure Statement plicant	Applicant Michael Martin		
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	Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner Initial	Desig. ID	Document
	AI	Brigham et al., "Expression of a prokaryotic gene in cultured lung endothelial cells after lipofection with a plasmid vector" Am. J. Resp. Cell. Mol. Biol. 1:95 100 (1989)
	AJ	Brown and Greene, "Molecular and cellular mechanisms of receptor-mediated endocytosis" DNA and Cell Biology 10:6, 399-409 (1991)
	AK	Cichon (2001) "Complement activation by recombinant adenoviruses" Gene Ther 8:1794-1800
	AL	Cohen (2002) "The immunopathogenesis of sepsis" Nature 420(6917):885-91
	AM	Cohen, "The role of protein phosphorylation in human health and disease" Eur. J. Biochem. 268:5001-5010 (2001).
	AN	Cross, D. A., D. R. Alessi, P. Cohen, M. Andjelkovich, and B. A. Hemmings 1995. Inhibition of glycogen synthase kinase-3 by insulin mediated by protein kinase B Nature. 378:785-789
	AO	Cross, D. A., A. A. Culbert, K. A. Chalmers, L. Facci, S. D. Skaper, and A. D. Reith 2001. Selective small-molecule inhibitors of glycogen synthase kinase-3 activity protect primary neurones from death J. Neurochem. 77:94-102
	AP	Demarchi et al., "Gas6 anti-apoptotic signaling requires NF-kappaB activation" J. Biol. Chem. 276:31738-31744 (2001)
	AQ	Demarchi et al., "Glycogen synthase kinase-3 beta regulates NF-kappaB1/p105 stability" J. Biol. Chem. 278:39583-90 (2003)
	AR	Doble and Woodgett "GSK-3: trickes of the trade for a multi-tasking kinase" J. Cell Sci. 116:1175-86 (2003)
	AS	Dinarello, C. A. 2000. "Proinflammatory cytokines" Chest. 118:503-508
	AT	Feghali et al., "Cytokines in acute and chronic inflammation" Frontiers in Bioscience 2, d12-26, January 1, 1997
•	AU	Franke, T. F., D. R. Kaplan, L. C. Cantley, and A. Toker 1997. Direct regulation of the Akt proto- oncogene product by phosphatidylinositol-3,4-bisphosphate Science. 275:665-668
	AV	Fukao, T., M. Tanabe, Y. Terauchi, T. Ota, S. Matsuda, T. Asano, T. Kadowaki, T. Takeuchi, and S. Koyasu 2002. PI3K-mediated negative feedback regulation of IL-12 production in DCs Nat. Immunol. 3:875-881
	AW	Fukao, T., T. Yamada, M. Tanabe, Y. Terauchi, T. Ota, T. Takayama, T. Asano, T. Takeuchi, T. Kadowaki, J. J. Hata, and S. Koyasu 2002. Selective loss of gastrointestinal mast cells and impaired immunity in PI3K-deficient mice. Nat Immunol. 3:295-304
	AX	Ghosh et al., "NF-kappaB and rel proteins: evolutionary conserved mediators of immune responses" Annu. Rev. Immunol. 16:225-260 (1998)
	AY	Grimes and Jope "CREB DNA binding activity is inhibited by glycogen synthase kinase-3 beta and facilitated by lithium" J. Neurochem. 78:1219-1232 (2001)
	AZ	Guha, M., and N. Mackman 2002. The phosphatidylinositol 3-kinase-Akt pathway limits lipopolysaccharide activation of signaling pathways and expression of inflammatory mediators in human monocytic cells J. Biol. Chem. 277:32124-32132
	AAA	Han, S. H., J. H. Kim, M. Martin, S. M. Michalek, and M. H. Nahm 2003. Pneumococcal lipoteichoic acid (LTA) is not as potent as staphylococcal LTA in stimulating Toll-like receptor 2 Infect. Immun. 71:5541-5548

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IIIIuai	ABB	Hirschfeld, M., Y. Ma, J. H. Weis, S. N. Vogel, and J. J. Weis 2000. Cutting edge: repurification of lipopolysaccharide eliminates signaling through both human and murine toll-like receptor 2 J. Immunol. 165:618-622
	ACC	Hirschfeld, M., J. J. Weis, V. Toshchakov, C. A. Salkowski, M. J. Cody, D. C. Ward, N. Qureshi, S. M. Michalek, and S. N. Vogel 2001. Signaling by Toll-like receptor 2 and 4 agonists results in differential gene expression in murine macrophages Infect. Immun. 69:1477-1482
	ADD	Hoeflich et al., "Requirement for glycogen synthase kinase-3 beta in cell survival and NF-kappaB activation" Nature 406:86-90 (2000)
	AEE	Howard, M., T. Muchamuel, S. Andrade, and S. Menon 1993. Interleukin 10 protects mice from lethal endotoxemia J. Exp. Med. 177:1205-1208
	AFF	Jooss, K. (2003) "Immunity to adenovirus and adeno-associated viral vectors: implications for gene therapy" Gene Ther. 10:955-963
	AGG	Kim et al., "Glycogen synthase kinase 3beta is a natural activator of mitogen-activated protein kinase/extracellular signal-regulated kinase kinase l (MEKK1)" Journal of Biological Chemistry 278(16):13995-14001 (2003).
	АНН	Klein and Melton "A molecular mechanism for the effect of lithium on development" PNAS 93:8455-59 (1996)
	AII	Kunick et al., "1-Azakenpaullone is a selective inhibitor of glycogen synthase kinase-3 beta" Bioorg. Med. Chem. Lett. 19:413-6 (2004)
	AJJ	Lawlor, M. A., and D. R. Alessi 2001. PKB/Akt: a key mediator of cell proliferation, survival and insulin responses? J. Cell. Sci. 114:2903-2910
	AKK	Martin, M., R. E. Schifferle, N. Cuesta, S. N. Vogel, J. Katz, and S. M. Michalek 2003. Role of the phosphatidylinositol 3 kinase-Akt pathway in the regulation of IL-10 and IL-12 by Porphyromonas gingivalis lipopolysaccharide J. Immunol. 171:717-725
	ALL	Meijer et al., "GSK-3 selective inhibitors derived from Tyrian purple indirubins" Chem. Biol. 10:1255-66 (2003)
	AMM	Morton et al., "A reinvestigation of the multisite phosphorylation of the transcription factor c-Jun" EMBO Journal 22(15):3876-3886 (2003).
	ANN	Nemeth et al., "Lithium induces NF-kappaB activation and interleukin-8 production in human intestinal epithelial cells" J. Biol. Chem. 277:7713-9 (2002)
	A00	O'Neill, L. A., and C. A. Dinarello 2000. The IL-1 receptor/toll-like receptor superfamily: crucial receptors for inflammation and host defense Immunol. Today. 21:206-209
	APP	Parker et al., "Phosphorylation of CREB at Ser-133 induces complex formation with CREB-binding protein via a direct mechanism" Mol. Cell Biol. 16:694-703 (1996)
	AQQ	Parry and Mackman "Role of cyclic AMP response element binding protein in cyclic AMP inhibition of NV-kappaB-mediated mechanism" J. Immunol. 159:5450-6 (1997)
	ARR	Pietersz and McKenzie, "Antibody conjugates for the treatment of cancer" Immunolog. Reviews, 129:57-80, (1992)
	ASS	Platzer et al., "Cyclic adenosine monophosphate-responsive elements are involved in the transcriptional activation of the human IL-10 gene in monocytic cells" Eur. J. Immunol. 29:3098-3104 (1999)
	ATT	Roffler, et al., "Anti-neoplastic glucuronide prodrug treatment of human tumor cells targeted with a monoclonal antibody-enzyme conjugate" Biochem. Pharmacol, 42:2062-2065, (1991)

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mittal	AUU	Schwabe and Brenner "Role of glycogen synthase kinase-3 in TNF-alpha-induced NF-kappaB activation and apoptosis in hepatocytes" Am. J. Physiol. Gastrointest. Liver Physiol. 283:G204-G211 (2002)	
•	AVV	Senter, et al., "Generation of 5-fluorouracil from 5-fluorocytosine by monoclonal antibody-cytosine deaminase conjugates" Bioconjugate Chem., 2:447-451, (1991)	
	AWW	Senter, et al., "Generation of cytotoxic agents by targeted enzymes" Bioconjugate Chem., 4:3-9, (1993)	
	AXX	Sheppard et al., "Transcriptional activation by NF-kappaB requires multiple coactivators" Mol. Cell Biol. 19:6367-6378 (1999)	
	AYY	Stambolic et al., "Lithium inhibits glycogen synthase kinase-3 activity and mimics wingless signaling in intact cells" Curr. Biol. 6:1664-1668 (1996)	
	AZZ	Stokoe, D. L. R., L. R. Stephens, T. Copeland, R. Piers, J. Gaffney, C. B. Reese, G. F. Painter, A. B. Holmes, F. McCormick, and P. T. Hawkins 1997. Dual role of phosphatidylinositol-3,4,5-trisphosphate in the activation of protein kinase B Science. 277:567-570	
	AAAA	Tapping, R. I., S. Akashi, K. Miyake, P. J. Godowski, and P. S. Tobias 2000. Toll-like receptor 4, but not Toll-like receptor 2, is a signaling receptor for Escherichia and Salmonella lipopolysaccharides J. Immunol. 165:5780-5787	
	ABBB	Walport, M.J. (2001) "Complement. First of two parts" N Eng J Med 344:1058-1066	
	ACCC	Walport, M.J. (2001) "Complement. Second of two parts." N Eng J Med 344:1140-1144	
	ADDD	Zaiss, A.K. (2002) "Differential activation of innate immune responses by adenovirus and adeno-associated virus vectors" J. Virol. 76:4580-4590	
	AEEE	Zhong et al., "Phosphorylation of NF-kappaB p65 by PKA stimulates transcriptional activity by promoting a novel bivalent interaction with the coactivator CBP/p300" Mol. Cell 1:661-671 (1998)	
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